Available online at www.sciencedirect.com
SCIENCE DIRECT®
The Journal of Systems and Software 73 (2004) 563–565
The Journal of Systems and Software
www.elsevier.com/locate/jss

Contents Volume 73

Contents

Special Issue: Performance modeling and analysis of computer systems and networks
Performance modeling and analysis of computer systems and networks
H.D. Karatza 1

Broadcasting schemes for hypercubes with background traffic
D.D. Kouvatsos and I.M. Mkwawa 3

Design and analysis of a replicated elusive server scheme for mitigating denial of service attacks
C. Sangpachatanaruk, S.M. Khattab, T. Znati, R. Melhem and D. Mossé 15

File distribution using a peer-to-peer network—a simulation study
K.G. Zerfiridis and H.D. Karatza 31

How accurate should early design stage power/performance tools be? A case study with statistical simulation
L. Eeckhout and K. De Bosschere 45

Approximating the connectivity between nodes when simulating large-scale mobile ad hoc radio networks
C.L. Barrett, M.V. Marathe, D. Charles Engelhart and A. Sivasubramaniam 63

Proactive QoS negotiation in asynchronous real-time distributed systems
P. Li and B. Ravindran 75

Feasibility analysis of hard real-time periodic tasks
M. Park and Y. Cho 89

Regular papers
A cost model for spatio-temporal queries using the TPR-tree
Y.-J. Choi, J.-K. Min and C.-W. Chung 101

An efficient query optimization strategy for spatio-temporal queries in video databases
G. Ünel, M.E. Dönderler, Ö. Ulusoy and U. Güdükbay 113

ACODF: a novel data clustering approach for data mining in large databases
C.-F. Tsai, C.-W. Tsai, H.-C. Wu and T. Yang 133

On accessing data in high-dimensional spaces: A comparative study of three space partitioning strategies
J. Lukaszuk and R. Orlandic 147

Supporting metasearch with XSL
R.W.P. Luk, T.S. Dillon and V.T.Y. Ng 159

A top-down approach for density-based clustering using multidimensional indexes
J.-J. Hwang, K.-Y. Whang, Y.-S. Moon and B.-S. Lee 169

Special Issue: Applications of statistics in software engineering
Applications of statistics in software engineering
K. El Emam and A.D. Carleton 181

doi:10.1016/S0164-1212(04)00114-1

Statistical significance testing—a panacea for software technology experiments?
J. Miller 183

BBN-based software project risk management
C.-F. Fan and Y.-C. Yu 193

Using multiple adaptive regression splines to support decision making in code inspections
L.C. Briand, B. Freimut and F. Vollei 205

Computing system reliability using Markov chain usage models
S.J. Prowell and J.H. Poore 219

Applications of clustering techniques to software partitioning, recovery and restructuring
C.-H. Lung, M. Zaman and A. Nandi 227

Regular papers

Assessing the cost-effectiveness of software reuse: A model for planned reuse
D.L. Nazareth and M.A. Rothenberger 245

Applying sampling to improve software inspections
T. Thelin, H. Petersson, P. Runeson and C. Wohlin 257

Resource constraints analysis of workflow specifications
H. Li, Y. Yang and T.Y. Chen 271

Multi-devices "Multiple" user interfaces: development models and research opportunities
A. Seffah, P. Forbrig and H. Javahery 287

A simple and powerful type system for programming languages
R.F. Ayres 301

Knowledge centered assessment pattern: an effective tool for assessing safety concerns in software architecture
S. Khajenoori, L. Prem, K. Stevens, B.S. Keng and N. Kameli 313

Selecting components in large COTS repositories
J. Clark, C. Clarke, S. De Panfilis, G. Granatella, P. Predonzani, A. Sillitti, G. Succi and T. Vernazza 323

A framework instantiation approach based on the Features Model
I. Mathias Filho, T.C. de Oliveira and C.J.P. de Lucena 333

Quantitative evaluation of safety critical software testability based on fault tree analysis and entropy
S. Sohn and P.H. Seong 351

Task-directed software inspection
D. Kelly and T. Shepard 361

Solving the invalid signer-verified signature problem and comments on Xia–You group signature
H.-Y. Chien, J.-K. Jan and Y.-M. Tseng 369

Role-based authorizations for workflow systems in support of task-based separation of duty
D.-R. Liu, M.-Y. Wu and S.-T. Lee 375

Fuzzy resource space model and platform
H. Zhuge 389

A new design of efficient partially blind signature scheme
H.-F. Huang and C.-C. Chang 397

Secret image sharing with steganography and authentication
C.-C. Lin and W.-H. Tsai 405

A practical experience in workspace separation for developing multiple storefronts on customized commerce engines
S.-K. Chen, T.C. Chieu, S.S. Fu, Y.-H. Liu, F. Pinel and J.-S. Yih 415

Providing flexible access control to an information flow control model
S.-C. Chou 425

Secure one snapshot protocol for concurrency control in real-time stock trading systems
N. Kim, S. Moon and Y. Sohn 441

Retrieve images by understanding semantic links and clustering image fragments
H. Zhuge 455

A simulated annealing approach for multimedia data placement
E. Terzi, A. Vakali and L. Angelis 467

Temporal moving pattern mining for location-based service
J.W. Lee, O.H. Paek and K.H. Ryu 481

Performance evaluation of a database of repetitive elements in complete genomes
J.-T. Horng, F.-M. Lin, L.-C. Wu and C.-H. Chang 491

On the efficiency of nonrepudiable threshold proxy signature scheme with known signers
C.-Y. Yang, S.-F. Tzeng and M.-S. Hwang 507

A video caching policy for providing differentiated service grades and maximizing system revenue in hierarchical video servers
S.-R. Tong, Y.-T. Yu and C.-M. Huang 515

Modeling and implementation of digital rights
S.O. Hwang, K.S. Yoon, K.P. Jun and K.H. Lee 533

An adaptable vertical partitioning method in distributed systems
J.H. Son and M.H. Kim 551

Contents Volume 73 563